

FIG. 1A

[FIRST CYLINDER]

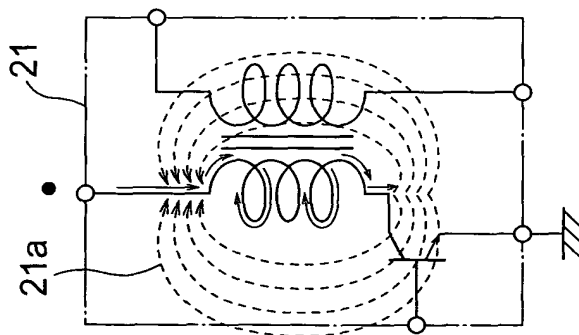


FIG. 1B

[SECOND CYLINDER]

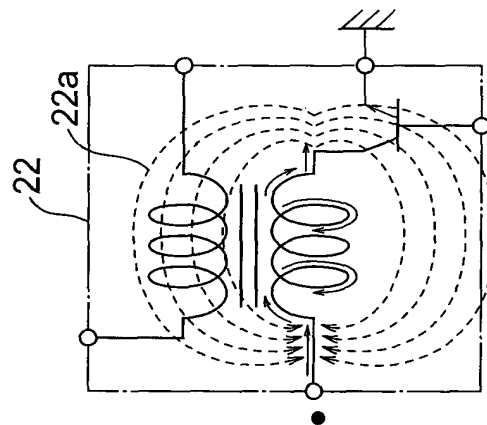


FIG. 1C

[THIRD CYLINDER]

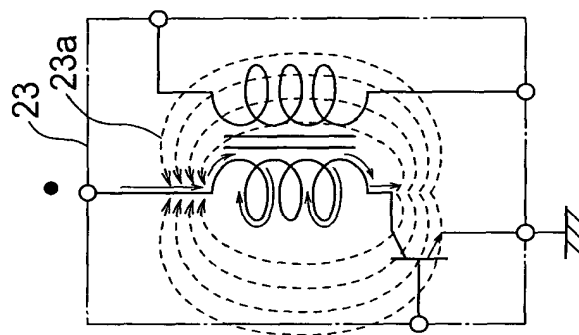


FIG. 1D

[FOURTH CYLINDER]

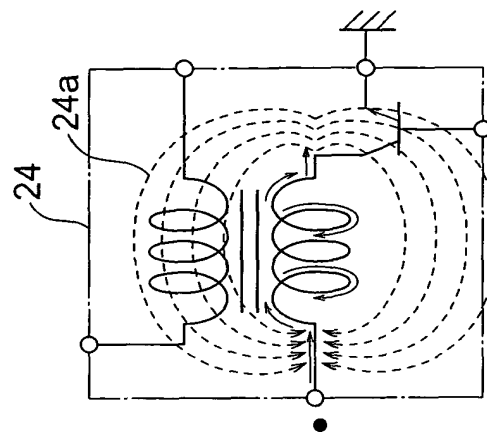


FIG. 2

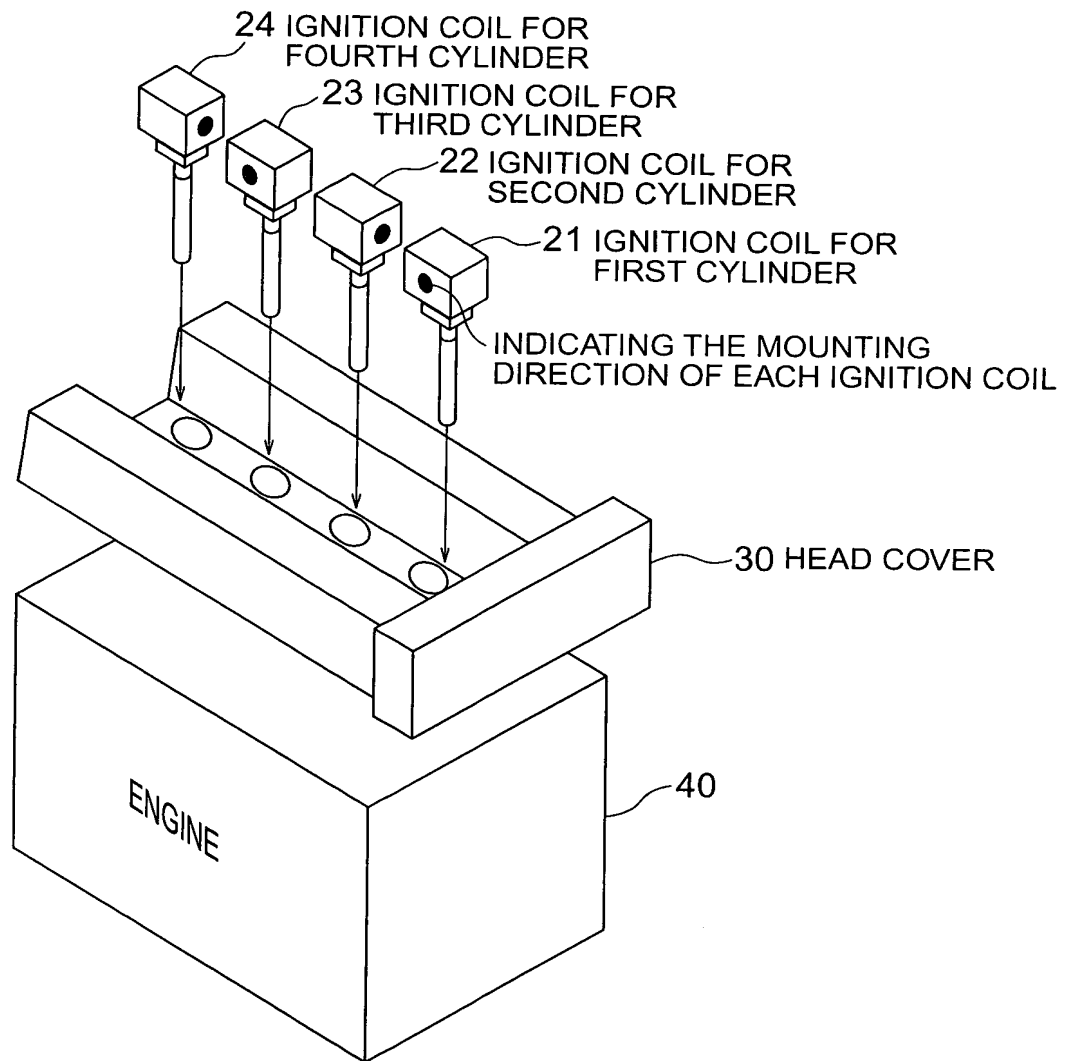


FIG. 3

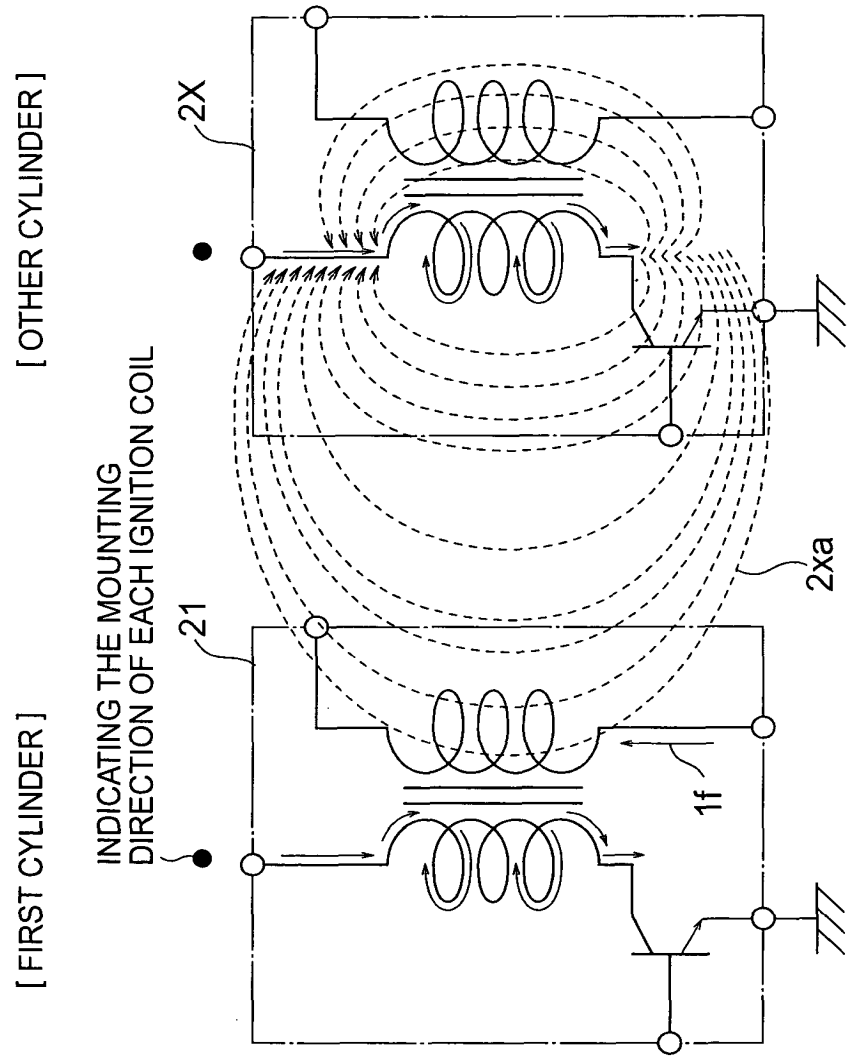


FIG. 4A

IGNITION SIGNAL FOR FIRST CYLINDER

START OF ENERGIZATION



FIG. 4B

IGNITION SIGNAL FOR SECOND - FOURTH CYLINDERS

VIBRATION COMPONENT OF KNOCKING

OTHER CYLINDERS START OF ENERGIZATION

PREDETERMINED TIME



FIG. 4C

IONIC CURRENT

FALSE IONIC CURRENT if COMBUSTION PULSE THRESHOLD VALUE



FIG. 4D

REGULAR COMBUSTION PULSE

COMBUSTION PULSE TRAIN

ERROR PULSE

FALSE KNOCK COMPONENT SIGNAL

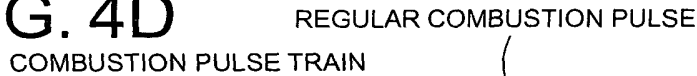


FIG. 4E

KNOCK COMPONENT SIGNAL

COMBUSTION PULSE THRESHOLD VALUE



FIG. 4F

REGULAR KNOCK PULSES

KNOCK PULSE TRAIN

ERROR KNOCK PULSE



FIG. 4G

IONIC CURRENT AFTER LIMITATION OF IONIC CURRENT

COMBUSTION PULSE THRESHOLD VALUE

NO FALSE IONIC SIGNAL IS GENERATED



FIG. 4H

REGULAR COMBUSTION PULSE

COMBUSTION PULSE AFTER LIMITATION OF IONIC CURRENT



FIG. 4I

KNOCK COMPONENT SIGNAL AFTER LIMITATION OF KNOCK DETECTION

COMBUSTION PULSE THRESHOLD VALUE



FIG. 4J

KNOCK PULSE TRAIN

REGULAR KNOCK PULSES



FIG. 5

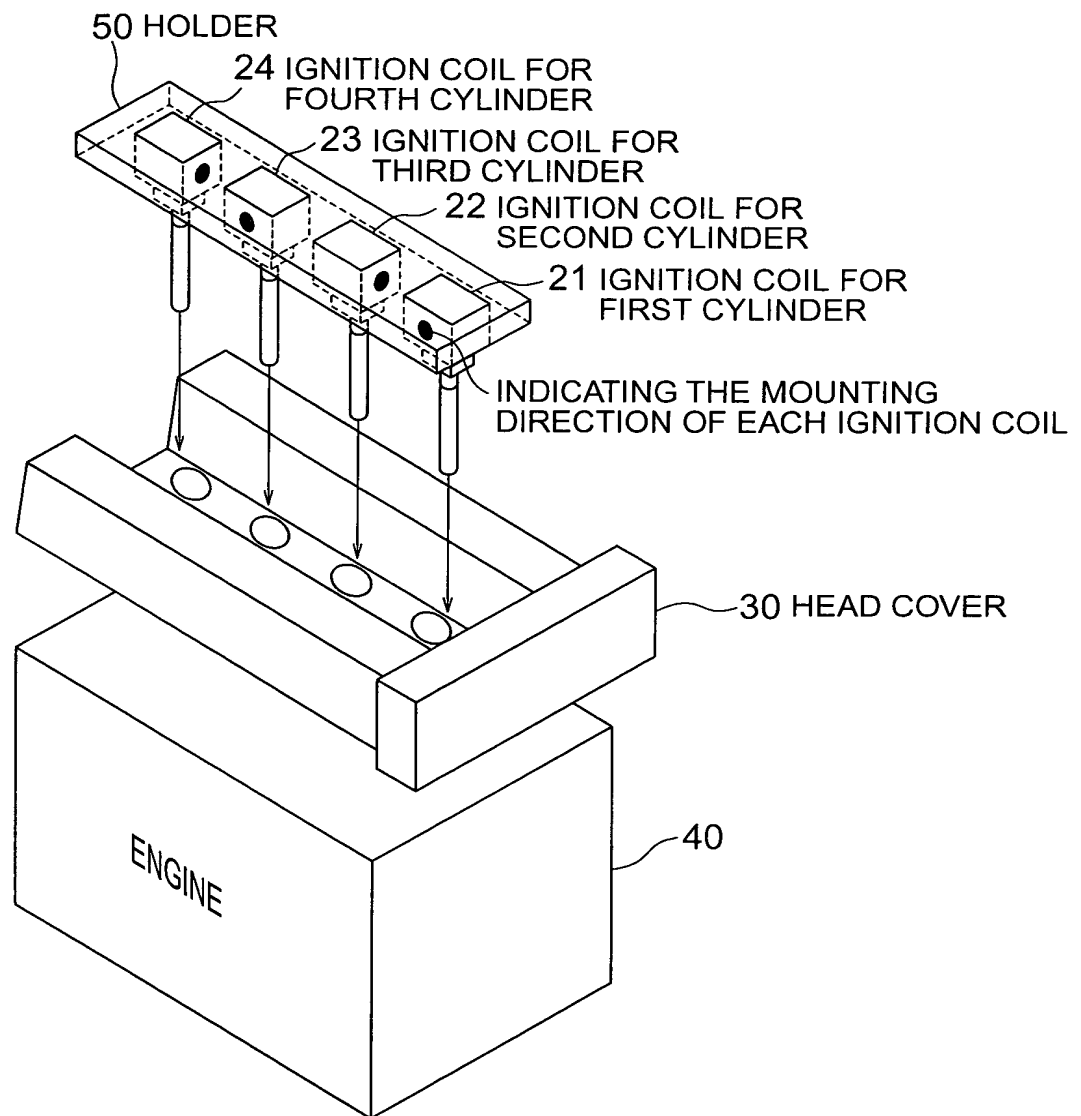


FIG. 6

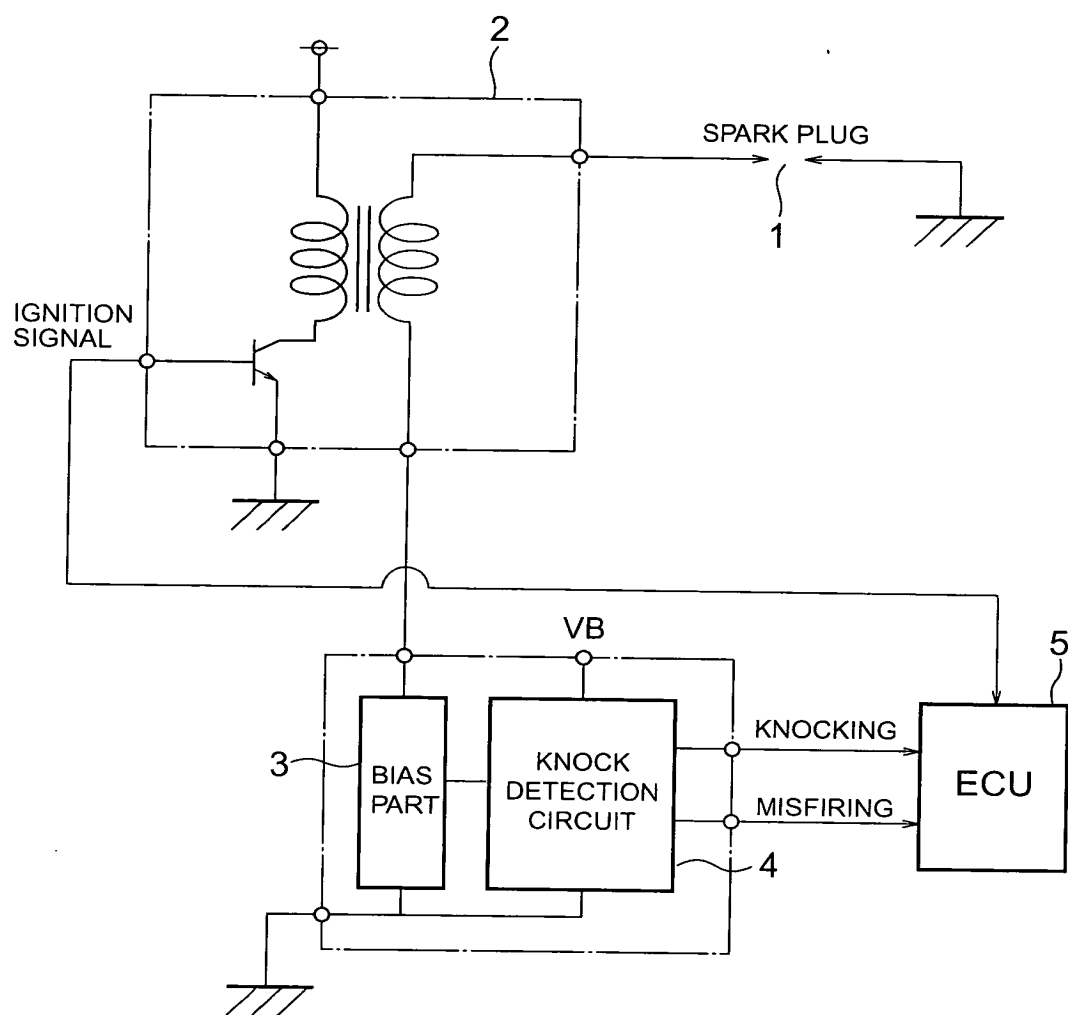


FIG. 7

